SEQUENCE LISTING

10 <120> Generation of specific binding partners binding to (poly)peptides encoded by genomic DNA fragments or ESTs

15 <130> Morpho/10

<140>

20 <141> 2001-02-28

<150> PCT/EP00/06137

<151> 2000-06-30

<150> EP 99 11 2815.8

25 <151> 1999-07-02

<160> 10

<170> PatentIn version 3.0

30

<210> 1

<211> 18

<212> PRT

35 <213> artificial sequence

<220>

<221> PEPTIDE

<222> (1)..(18)

40 <223> synthetic expression construct

<400> 1

Pro Tyr Asp Val Pro Asp Tyr Ala Ser Leu Arg Ser His His His His 1 5 10 15

His His

<223> synthetic construct hemagglutinin epitope

20 <400> 2

Asp Val Pro Asp Tyr Ala Ser 1 5

25 <210> 3 <211> 54 <212> DNA <213> artificial sequence

35 <400> 3
gtacgacgtt ccagactacg cttccctgcg ttcccatcac catcaccatc acta 54.

<210> 4 40 <211> 54 <212> DNA

```
<213> artificial sequence
    <220>
    <221> misc_feature
   <222> (1)..(54)
    <223> DNA primer for cloning of an oligonucleotide cassette
    <400> 4
    agcttagtga tggtgatggt gatgggaacg cagggaagcg tagtctggaa cqtc
                                                                    54
10
    <210> 5
    <211> 216
    <212> PRT
    <213> artificial sequence
15
    <220>
    <221> PEPTIDE
    <222> (1)..(216)
    <223> synthetic contsruct
20
           contains amino acids 149-353 of human CR-3 alpha chain
    <400> 5
25
    Pro Tyr Gly Gly Ser Gly Gly Ser Gly Ser Asp Ile Ala Phe
                    5
                                        10
                                                            15
    Leu Ile Asp Gly Ser Gly Ser Ile Ile Pro His Asp Phe Arg Arg Met
                20
                                    25
                                                        30
30
    Lys Glu Phe Val Ser Thr Val Met Glu Gln Leu Lys Lys Ser Lys Thr
            35
                                40
                                                    45
    Leu Phe Ser Leu Met Gln Tyr Ser Glu Glu Phe Arg Ile His Phe Thr
35
        50
                            55
                                                60
    Phe Lys Glu Phe Gln Asn Asn Pro Asn Pro Arg Ser Leu Val Lys Pro
    65
                        70
                                            75
                                                                80
40
    Ile Thr Gln Leu Leu Gly Arg Thr His Thr Ala Thr Gly Ile Arg Lys
```

85

```
Val Val Arg Glu Leu Phe Asn Ile Thr Asn Gly Ala Arg Lys Asn Ala
                 100
                                     105
                                                         110
    Phe Lys Ile Leu Val Val Ile Thr Asp Gly Glu Lys Phe Gly Asp Pro
             115
                                 120
                                                     125
    Leu Gly Tyr Glu Asp Val Ile Pro Glu Ala Asp Arg Glu Gly Val Ile
        130
                             135
                                                 140
10
    Arg Tyr Val Ile Gly Val Gly Asp Ala Phe Arg Ser Glu Lys Ser Arg
    145
                         150
                                             155
                                                                 160
    Gln Glu Leu Asn Thr Ile Ala Ser Lys Pro Pro Arg Asp His Val Phe
15
                     165
                                         170
                                                             175
    Gln Val Asn Asn Phe Glu Ala Leu Lys Thr Ile Gln Asn Gln Leu Arg
                 180
                                     185
                                                         190
    Glu Lys Ile Phe Ala Ile Glu Gly Thr Gln Thr Gly Ser Ser Ser
20
            195
                                 200
                                                     205
    Phe Glu His Glu Met Ser Gln Glu
        210
                             215
25
    <210> 6
    <211> 62
    <212> DNA
    <213> artificial sequence
30
    <220> ...
    <221> misc_feature .
    <222> (1)..(62)
    <223> synthetic construct
35
           DNA forward primer
    <400> 6
    gtacgtacgg gggcggctct ggtggtggtt ctggtagtga cattgccttc ttgattgatg
```

gс

	<210>	7				
	<211>	69				
	<212>	DNA				
5	<213>	artificial sequence				
	<220>					
	<221>	misc_feature				
	<222>	(1)(69)				
10	<223>	synthetic construct				
		DNA reverse primer				
	<400>					
	gtaaag	ctta gtgatggtga tggtgatgtc tac	cttcgat ttcctgagac	atctcatgct	60	
15						
	caaagg	agc			69	
	<210>	8				
20	<211>					
20	<212>					
		artificial sequence				
	<220>					
25	<221>	misc feature				
	<223>	synthetic construct				
	expression vector					
30	<400>	8 .				
	acccgag	cacc atcgaaatta atacgactca cta	tagggag accacaacgg	tttccctaat	60	
	tgtgag	egga taacaataga aataattttg ttt	aacttta agaaggagat	atatccatgg :	120	
35	ctgaaa	ctgt tgaaagttgt ttagcaaaat ccc	atacaga aaattcattt	actaacgtct 1	180	
	ggaaaga	acga caaaacttta gatcgttacg cta	actatga gggctgtctg	tggaatgcta 2	240	
40	caggcgt	tgt agtttgtact ggtgacgaaa ctc	agtgtta cggtacatgg	gttcctattg	300	
40	~~~ <del>~</del>	tat ccctgaaaat gaggtggtg gct	ctalaga taggasttst	anagata	360	

	gttctccgta	cggctctaga	gtcgacgagc	tcgatatcgg	cggccgcgaa	ttctctcatc	420
5	accatcacca	tcactaagct	tcagtcccgg	gcagtggatc	cggctgctaa	caaagcccga	480
	aaggaagctg	agttggctgc	tgccaccgct	gagcaataac	tagcataacc	ccttggggcc	540
	tctaaacggg	tcttgagggg	ttttttgctg	aaaggaggaa	ctatatccgg	atcgagatcc	600
10	ccacgcgccc	tgtagcggcg	cattaagcgc	ggcgggtgtg	gtggttacgc	gcagcgtgac	660
	cgctacactt	gccagcgccc	tagcgcccgc	tcctttcgct	ttcttccctt	cctttctcgc	720
15	cacgttcgcc	ggctttcccc	gtcaagctct	aaatcggggc	atccctttag	ggttccgatt	780
	tagtgcttta	cggcacctcg	accccaaaaa	acttgattag	ggtgatggtt	cacgtagtgg	840
	gccatcgccc	tgatagacgg	tttttcgccc	tttgacgttg	gagtccacgt	tctttaatag	900
20	tggactcttg	ttccaaactg	gaacaacact	caaccctatc	tcggtctatt	cttttgattt	960
	ataagggatt	ttgccgattt	cggcctattg	gttaaaaaat	gagctgattt	aacaaaaatt	1020
25	taacgcgaat	tttaacaaaa	tattaacgtt	tacaatttca	ggtggcactt	ttcggggaaa	1080
	tgtgcgcgga	acccctattt	gtttatttt	ctaaatacat	tcaaatatgt	atccgctcat	1140
	gagacaataa	ccctgataaa	tgcttcaata	atattgaaaa	aggaagagta	tgagtattca	1200
30	acatttccgt	gtcgccctta	ttcccttttt	tgcggcattt	tgccttcctg	tttttgctca	1260
	cccagaaacg	ctggtgaaag	taaaagatgc	tgaagatcag	ttgggtgcac	gagtgggtta	1320
35	catcgaactg	gatctcaaca	gcggtaagat	ccttgagagt	tttcgccccg	aagaacgttt	1380
	tccaatgatg	agcactttta	aagttctgct	atgtggcgcg	gtattatccc	gtattgacgc	1440
	cgggcaagag	caactcggtc	gccgcataca	ctattctcag	aatgacttgg	ttgagtactc	1500
10	accagtcaca	gaaaagcatc	ttacqqatqq	catgacagta	agagaattat	gcagtgctgc	1560

1620 cataaccatg agtgataaca ctgcggccaa cttacttctg acaacgatcg gaggaccgaa 1680 ggagctaacc gcttttttgc acaacatggg ggatcatgta actcgccttg atcgttggga 1740 accggagetg aatgaageea taccaaacga egagegtgae accaegatge etgtageaat 1800 ggcaacaacg ttgcgcaaac tattaactgg cgaactactt actctagctt cccggcaaca attaatagac tggatggagg cggataaagt tgcaggacca cttctgcgct cggcccttcc 1860 10 ggctggctgg tttattgctg ataaatctgg agccggtgag cgtgggtctc gcggtatcat 1920 tgcagcactg gggccagatg gtaagccctc ccgtatcgta gttatctaca cgacggggag 1980 15 tcaggcaact atggatgaac gaaatagaca gatcgctgag ataggtgcct cactgattaa 2040 2100 gcattggtaa ctgtcagacc aagtttactc atatatactt tagattgatt taaaacttca tttttaattt aaaaggatct aggtgaagat cctttttgat aatctcatga ccaaaatccc 2160 20 ttaacgtgag ttttcgttcc actgagcgtc agaccccgta gaaaagatca aaggatcttc 2220 ttgagatect ttttttetge gegtaatetg etgettgeaa acaaaaaae cacegetace 2280 2340 25 agcggtggtt tgtttgccgg atcaagagct accaactctt tttccgaagg taactggctt 2400 cagcagagcg cagataccaa atactgtcct tctagtgtag ccgtagttag gccaccactt caagaactet gtagcaccge ctacatacet egetetgeta atectgttac cagtggetge 2460 30 tgccagtggc gataagtcgt gtcttaccgg gttggactca agacgatagt taccggataa 2520 ggcgcagcgg tcgggctgaa cggggggttc gtgcacacag cccagcttgg agcgaacgac 2580 35 ctacaccgaa ctgagatacc tacagcgtga gctatgagaa agcgccacgc ttcccgaagg 2640 2700 gagaaaggcg gacaggtatc cggtaagcgg cagggtcgga acaggagagc gcacgaggga gcttccaggg ggaaacgcct ggtatcttta tagtcctgtc gggtttcgcc acctctgact 2760 40 2820 tgagcgtcga tttttgtgat gctcgtcagg ggggcggagc ctatggaaaa acgccagcaa

	cgcggc	cttt	ttacggttcc	tggccttttg	ctggcctttt	gctcacatg		2869
5	<210>	9						
	<211>	2865	5					
	<212>	DNA						
	<213>	arti	ificial sequ	uence				
10	<220>							
	<221>	misc	_feature					
	<222>	(1).	(2865)					
	<223>	synt	thetic const	ruct				
	expression vector							
15								
	<400>	9						
	acccgad	cacc	atcgaaatta	atacgactca	ctatagggag	accacaacgg	tttccctaat	60
20	tgtgag	cgga	taacaataga	aataattttg	tttaacttta	agaaggagat	atatccatgg	120
20	ctcato	2002	taaaataaa	annatatta	2224+4++	2002222		100
	CCCacca	acca	CCaccaccac	gaaactgttg	adagicgccc	agcadaatcc	Cacacagaaa	180
	attcatt	tac	taacgtctgg	aaagacgaca	aaactttaga	togttacgct	aactatgagg	240
						oogoodo	aaccacgagg	2.10
25	gctgtct	gtg	gaatgctaca	ggcgttgtag	tttgtactgg	tgacgaaact	cagtgttacg	300
	gtacato	gggt	tcctattggg	cttgctatcc	ctgaaaatga	gggtggtggc	tctgagggtg	360
	•							
	gcggtto	tga	gggtggcggt	tcttctagag	tcgacgagct	cgatatcgaa	ttcggcggcc	420
30								
	gctaact	gac	taagcttcag	tcccgggcag	tggatccggc	tgctaacaaa	gcccgaaagg	480
			•					
	aagctga	gtt	ggctgctgcc	accgctgagc	aataactagc	ataacccctt	ggggcctcta	540
35	aacgggt	ctt	gaggggtttt	ttgctgaaag	gaggaactat	atccggatcg	agatccccac	600
	gcgccct	gta	gcggcgcatt	aagcgcggcg	ggtgtggtgg	ttacgcgcag	cgtgaccgct	660
								<b>-</b>
40	acactto	ıcca	gcgccctagc	gcccgctcct	ttcgctttct	tcccttcctt	tctcgccacg	720
40	ttcccc	rac+	ttccccata-	agctctaaat		attta		780
		ruut	LLLLLLLLLLLLLLLLLLLLLLLLLLLLLLLLLLLLLLL	aucuctaaar	LududuCalcc	LLLAGGGTT	LUUALLLACE	100

gctttacggc acctcgaccc caaaaaactt gattagggtg atggttcacg tagtgggcca 840 tegecetgat agaeggtttt tegecetttg aegttggagt eeaegttett taatagtgga 900 5 ctcttgttcc aaactggaac aacactcaac cctatctcgg tctattcttt tgatttataa 960 1020 gggattttgc cgatttcggc ctattggtta aaaaatgagc tgatttaaca aaaatttaac 10 gcgaatttta acaaaatatt aacgtttaca atttcaggtg gcacttttcg gggaaatgtg 1080 cgcggaaccc ctatttgttt atttttctaa atacattcaa atatgtatcc gctcatgaga 1140 caataaccct gataaatgct tcaataatat tgaaaaagga agagtatgag tattcaacat 1200 15 tteegtgteg ccettattee ettttttgeg geattttgee tteetgtttt tgeteaceea 1260 gaaacgctgg tgaaagtaaa agatgctgaa gatcagttgg gtgcacgagt gggttacatc 1320 20 1380 gaactggatc tcaacagcgg taagatcctt gagagttttc gccccgaaga acgttttcca atgatgagca cttttaaagt tctgctatgt ggcgcggtat tatcccgtat tgacgccggg 1440 1500 caagagcaac tcggtcgccg catacactat tctcagaatg acttggttga gtactcacca 25 gtcacagaaa agcatcttac ggatggcatg acagtaagag aattatgcag tgctgccata 1560 accatgagtg ataacactgc ggccaactta cttctgacaa cgatcggagg accgaaggag 1620 30 ctaaccgctt ttttgcacaa, catgggggat catgtaactc gccttgatcg ttgggaaccg 1680 gagetgaatg aagceatace. aaacgaegag egtgaeacea egatgeetgt ageaatggea 1740 1800 acaacgttgc gcaaactatt aactggcgaa ctacttactc tagcttcccg gcaacaatta 35 1860 atagactgga tggaggcgga taaagttgca ggaccacttc tgcgctcggc ccttccggct ggctggttta ttgctgataa atctggagcc ggtgagcgtg ggtctcgcgg tatcattgca 1920 40 gcactggggc cagatggtaa gccctcccgt atcgtagtta tctacacgac ggggagtcag 1980

gcaactatgg atgaacgaaa tagacagatc gctgagatag gtgcctcact gattaagcat 2040 tggtaactgt cagaccaagt ttactcatat atactttaga ttgatttaaa acttcatttt 2100 5 taatttaaaa ggatctaggt gaagatcctt tttgataatc tcatgaccaa aatcccttaa 2160 cgtgagtttt cgttccactg agcgtcagac cccgtagaaa agatcaaagg atcttcttga 2220 gatccttttt ttctgcgcgt aatctgctgc ttgcaaacaa aaaaaccacc gctaccagcg 2280 10 gtggtttgtt tgccggatca agagctacca actctttttc cgaaggtaac tggcttcagc 2340 agagcgcaga taccaaatac tgtccttcta gtgtagccgt agttaggcca ccacttcaag 2400 15 aactctgtag caccgcctac atacctcgct ctgctaatcc tgttaccagt ggctgctgcc 2460 agtggcgata agtcgtgtct taccgggttg gactcaagac gatagttacc ggataaggcg 2520 cagcggtcgg gctgaacggg gggttcgtgc acacagccca gcttggagcg aacgacctac 2580 20 accgaactga gatacctaca gcgtgagcta tgagaaagcg ccacgcttcc cgaagggaga 2640 aaggcggaca ggtatccggt aagcggcagg gtcggaacag gagagcgcac gagggagctt 2700 25 ccagggggaa acgcctggta tctttatagt cctgtcgggt ttcgccacct ctgacttgag 2760 cgtcgatttt tgtgatgctc gtcagggggg cggagcctat ggaaaaacgc cagcaacgcg 2820 gcctttttac ggttcctggc cttttgctgg ccttttgctc acatg 2865

30

<210> 10

<211> 4357

35

<212> DNA

<213> artificial sequence

<220>

5

<221> misc feature

<222> (1)..(4357)

<223> synthetic construct expression vector

<400> 10

aagaaaccaa ttgtccatat tgcatcagac attgccgtca ctgcgtcttt tactggctct 60 10 tctcgctaac caaaccggta accccgctta ttaaaagcat tctgtaacaa agcgggacca 120 aagccatgac aaaaacgcgt aacaaaagtg tctataatca cggcagaaaa gtccacattg 180 attatttgca cggcgtcaca ctttgctatg ccatagcatt tttatccata agattagcgg 240 15 300 atcotacctg acgettttta tegeaactet etactgttte tecataceeg tttttttggg ctaacaggag gaattaacca tggctgaaac tgttgaaagt tgtttagcaa aatcccatac 360 20 agaaaattca tttactaacg tctggaaaga cgacaaaact ttagatcgtt acgctaacta 420 tgagggctgt ctgtggaatg ctacaggcgt tgtagtttgt actggtgacg aaactcagtg 480 ttacggtaca tgggttccta ttgggcttgc tatccctgaa aatgagggtg gtggctctga 540 25 600 gggtggcggt tctgagggtg gcggttctag agtcgacgag ctcgatatcg gcggccgcga atteteteat caccateace ateactaage ttgggeeega acaaaaacte ateteagaag 660 30 aggatetgaa tagegeegte gaccateate ateateatea ttgagtttaa aeggteteea 720 780 gcttggctgt ttttggcggat gagagaagat tttcagcctg atacagatta aatcagaacg cagaagcggt ctgataaaac agaatttgcc tggcggcagt agcgcggtgg tcccacctga 840 35 900 ceccatgeeg aacteagaag tgaaaegeeg tagegeegat ggtagtgtgg ggteteecea 960 tgcgagagta gggaactgcc aggcatcaaa taaaacgaaa ggctcagtcg aaagactggg 40 cetttegttt tatetgttgt ttgteggtga aegeteteet gagtaggaea aateegeegg 1020

gagcggattt gaacgttgcg aagcaacggc ccggagggtg gcgggcagga cgcccgccat 1080 aaactgccag gcatcaaatt aagcagaagg ccatcctgac ggatggcctt tttgcgtttc 1140 tacaaactct ttttgtttat ttttctaaat acattcaaat atgtatccgc tcatgagaca 1200 ataaccctga taaatgcttc aataatattg aaaaaggaag agtatgagta ttcaacattt 1260 ccgtgtcgcc cttattccct tttttgcggc attttgcctt cctgtttttg ctcacccaga 1320 10 aacgctggtg aaagtaaaag atgctgaaga tcagttgggt gcacgagtgg gttacatcga 1380 actggatctc aacagcggta agatccttga gagttttcgc cccgaagaac gttttccaat 1440 15 1500 gatgagcact tttaaagttc tgctatgtgg cgcggtatta tcccgtgttg acgccgggca agagcaactc ggtcgccgca tacactattc tcagaatgac ttggttgagt actcaccagt 1560 cacagaaaag catcttacgg atggcatgac agtaagagaa ttatgcagtg ctgccataac 1620 20 catgagtgat aacactgcgg ccaacttact tctgacaacg atcggaggac cgaaggagct 1680 aaccgctttt ttgcacaaca tgggggatca tgtaactcgc cttgatcgtt gggaaccgga 1740 gctgaatgaa gccataccaa acgacgagcg tgacaccacg atgcctgtag caatggcaac 1800 aacgttgcgc aaactattaa ctggcgaact acttactcta gcttcccggc aacaattaat 1860 agactggatg gaggcggata aagttgcagg accacttctg cgctcggccc ttccggctgg 1920 30 ctggtttatt gctgataaat ctggagccgg tgagcgtggg tctcgcggta tcattgcagc 1980 2040 actggggcca gatggtaagc cctcccgtat cgtagttatc tacacgacgg ggagtcaggc 35 2100 aactatggat gaacgaaata gacagatcgc tgagataggt gcctcactga ttaagcattg gtaactgtca gaccaagttt actcatatat actttagatt gatttaaaac ttcattttta 2160 atttaaaagg atctaggtga agatcctttt tgataatctc atgaccaaaa tcccttaacg 2220 40 tgagttttcg ttccactgag cgtcagaccc cgtagaaaag atcaaaggat cttcttgaga 2280

teettttttt etgegegtaa tetgetgett geaaacaaaa aaaccacege taccageggt 2340 ggtttgtttg ccggatcaag agctaccaac tctttttccg aaggtaactg gcttcagcag 2400 5 agegeagata ceaaataetg teettetagt gtageegtag ttaggeeace aetteaagaa 2460 ctctgtagca ccgcctacat acctcgctct gctaatcctg ttaccagtgg ctgctgccag 2520 10 tggcgataag tcgtgtctta ccgggttgga ctcaagacga tagttaccgg ataaggcgca 2580 geggteggge tgaaeggggg gttegtgeae acageeeage ttggagegaa egaeetaeae 2640 cgaactgaga tacctacage gtgagetatg agaaagegee aegetteeeg aagggagaaa 2700 15 ggcggacagg tatccggtaa gcggcagggt cggaacagga gagcgcacga gggagcttcc 2760 agggggaaac gcctggtatc tttatagtcc tgtcgggttt cgccacctct gacttgagcg 2820 20 tcgatttttg tgatgctcgt caggggggcg gagcctatgg aaaaacgcca gcaacgcggc 2880 ctttttacgg ttcctggcct tttgctggcc ttttgctcac atgttctttc ctgcgttatc 2940 ccctgattct gtggataacc gtattaccgc ctttgagtga gctgataccg ctcgccgcag 3000 25 ccgaacgacc gagcgcagcg agtcagtgag cgaggaagcg gaagagcgcc tgatgcggta 3060 ttttctcctt acgcatctgt gcggtatttc acaccgcata tggtgcactc tcagtacaat 3120 30 3180 ctgctctgat gccgcatagt taagccagta tacactccgc tatcgctacg tgactgggtc atggctgcgc cccgacaccc gccaacaccc gctgacgcgc cctgacgggc ttgtctgctc 3240 ccggcatccg cttacagaca agctgtgacc gtctccggga gctgcatgtg tcagaggttt 3300 35 tcaccgtcat caccgaaacg cgcgaggcag cagatcaatt cgcgcgcgaa ggcgaagcgg 3360 catgcataat gtgcctgtca aatggacgaa gcagggattc tgcaaaccct atgctactcc 3420 gtcaagccgt caattgtctg attcgttacc aattatgaca acttgacggc tacatcattc 3480

actttttctt cacaaccggc acggaactcg ctcgggctgg ccccggtgca ttttttaaat acccgcgaga aatagagttg atcgtcaaaa ccaacattgc gaccgacggt ggcgataggc atcogggtgg tgctcaaaag cagcttcgcc tggctgatac gttggtcctc gcgccaqctt aagacgctaa tccctaactg ctggcggaaa agatgtgaca gacgcgacgg cgacaagcaa acatgctgtg cgacgctggc gatatcaaaa ttgctgtctg ccaggtgatc gctgatgtac tgacaagcct cgcgtacccg attatccatc ggtggatgga gcgactcgtt aatcgcttcc atgegeegea gtaacaattg etcaageaga tttategeea geageteega atagegeeet teceettgee eggegttaat gatttgeeca aacaggtege tgaaatgegg etggtgeget tcatccgggc gaaagaaccc cgtattggca aatattgacg gccagttaag ccattcatgc cagtaggcgc gcggacgaaa gtaaacccac tggtgatacc attcgcgagc ctccggatga cgaccgtagt gatgaatctc tcctggcggg aacagcaaaa tatcacccgg tcggcaaaca aattctcgtc cctgattttt caccacccc tgaccgcgaa tggtgagatt gagaatataa cctttcattc ccagcggtcg gtcgataaaa aaatcgagat aaccgttggc ctcaatcggc gttaaacccg ccaccagatg ggcattaaac gagtatcccg gcagcagggg atcattttgc gcttcagcca tacttttcat actcccgcca ttcagag